

*ABSTRACT***HIGH POWER SEMICONDUCTOR LASER WITH A LARGE
OPTICAL SUPERLATTICE WAVEGUIDE**

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The invention relates to high power semiconductor diode lasers of the type commonly used in opto-electronics, mostly as so-called pump lasers for fiber amplifiers in the field of optical communication, e.g. for an erbium-doped fiber amplifier (EDFA) or a Raman amplifier. Such a laser, having a single cavity
10 and working in single transverse mode, is improved by placing a multilayer large optical superlattice structure (LOSL) into at least one of the provided cladding layers. This LOSL provides for a significantly improved shape of the exit beam allowing an efficient high power coupling into the fiber of an opto-electronic network.

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(Fig. 1)